2. BACKGROUND

Over the past decade, the FAA has worked closely with local and regional officials and with the STLAA aviation planning staff to investigate ways to accommodate the increasing passenger and operational activity demands at Lambert. As documented in Section 1.0, Introduction, of the FEIS, the present airport runway configuration, with two closely spaced parallel air carrier runways (12L/30R and 12R/30L), is currently responsible for significant airside delays, particularly during poor weather conditions. It is forecast that this configuration will be responsible for increasing such delays in the future.

The FAA has prepared an FEIS to identify the potential environmental effects associated with the construction and operation of proposed improvements to Lambert. The City of St. Louis, the owner and operator of Lambert, has completed a Master Plan Supplement (MPS) that proposes a comprehensive development program for the expansion of Lambert. The STLAA has submitted an ALP to the FAA for approval and requested from the FAA the Federal environmental approval necessary to proceed with the processing of an application for Federal funds.

AIRPORT DESCRIPTION

Lambert is located 12 miles northwest of the St. Louis central business district. The primary area served by Lambert includes nine counties and the City of St. Louis. This area is referred to as the St. Louis Metropolitan Statistical Area and encompasses approximately 5,340 square miles. Five counties and 24 percent of the service area's population is in Illinois, while four counties, the City of St. Louis, and 76 percent of the service area's population is in Missouri.

Currently, Lambert has two parallel air carrier runways: 12L/30R and 12R/30L. In addition, Lambert has two crosswind runways, Runways 6/24 and 17/35, and Runway 13/31, which is a converted taxiway that is only used for small aircraft in visual daytime conditions. Runway 13/31 will be converted back to a taxiway after the new Runway 12W/30W is operational.

Runway 12R/30L, Lambert’s longest runway, is 11,018 feet long, and the parallel Runway 12L/30R is 9,003 feet long. Runways 12R/30L and 12L/30R are separated by 1,300 feet. The airport is reduced to one precision instrument approach during adverse weather conditions because of the minimal separation of the parallel runways.

LAMBERT'S ROLE

Lambert is the primary commercial air carrier airport in the region and is one of the nation's major hub airports. It has consistently been ranked among the top 20 (Airport Council International) most active airports nationally, and in 1996, it ranked 14th in terms of total passengers (enplaned and deplaned) and 8th in total aircraft operations. In 1996, Lambert was served by nine scheduled air carriers, six cargo carriers and six commuter airlines.

Lambert serves as the primary connecting hub for TransWorld Airlines (TWA). In 1996, TWA offered direct service to over 70 cities. Approximately 60 percent of the enplaning passengers at Lambert were connecting passengers.

AIRPORT MASTER PLANNING PROCESS

Lambert-St. Louis International Airport Master Plan

Between the years 1987 and 1993, the STLAA prepared a comprehensive master plan study, the "Lambert-St. Louis International Airport Master Plan" (LAMP). The study developed forecasts of aviation demand through the year 2010 and proposed an airport development plan to enable Lambert to meet future projected demand levels.

The LAMP study culminated with the identification of a preferred airport development plan called Alternative F-4. This alternative proposed to rebuild the entire airfield while the airport continued to operate. Alternative F-4 would have reconfigured and expanded the airfield by rotating the alignment of the airport's main runway system clockwise approximately 10 degrees. This configuration involved the construction of new runways resulting in four parallel Runways (14R/32L, 14L/32R, 13R/31L, and 13L/31R) and the retention of existing crosswind Runway 6/24.

In 1993, a more detailed review of the F-4 concept was accomplished by the STLAA. This review indicated that the costs to construct the proposed F-4 plan would be significantly greater than originally anticipated. There were several problems with this Alternative's "constructability" (e.g., ability to phase and construct the alternative while maintaining continuous 24-hour operations, ability to maintain the hub at Lambert, and ability to operate the terminal and existing runways during construction). In particular, rotation of the airfield and the staging of its development would severely affect the ability of Lambert to operate as a hub for several years. The STLAA determined that it would be prudent to re-examine the development options at Lambert.

Master Plan Supplement

In 1994, the STLAA undertook a review and update to the master planning process at Lambert. This study, called the Master Plan Supplement (previously identified as MPS), re-examined the needs of Lambert. It resulted in the recommended course of development proposed by the STLAA and considered in the FEIS.

Aviation Demand Forecasts

During the development of the MPS, the City of St. Louis developed, refined, and updated aviation activity forecasts for Lambert, which considered the development and growth trends in the region, the aviation growth trends regionally and nationally, and changes in the airline industry. Before facility requirements were determined, the STLAA submitted forecasts representing unconstrained conditions to the FAA for its review and approval. The FAA approved the forecasts representing unconstrained conditions during the development of the MPS. Subsequently, the FAA issued FAA Safety Notice N7110.157, "Wake Turbulence." The Safety Notice has the effect of reducing airport capacity due to the recategorization of certain aircraft types and a resulting increase in separation standards. Taking into consideration the recently published guidelines, the FAA recognized that the unconstrained forecasts for the No-Action Alternative might not be achievable, given the configuration of the current runways. Therefore, the forecasts for the 2015 No-Action Alternative were adjusted to represent a constrained condition.

The MPS revised forecasts indicate that in the year 2015, Lambert has the potential to accommodate approximately 632,000 aircraft operations with the selected action, as compared to 595,000 aircraft operations without the proposed improvements. The FAA's revised 2015 No-Action constrained forecast for Lambert was 532,000 operations. The forecasts used in the FEIS and the FAA's Terminal Area Forecasts (TAF) are within the same range. Although the TAF are slightly higher than the FEIS forecasts, the differences are within a range that FAA considers to be insignificant and within the range of acceptable aviation forecasting.

Facility Requirements and Alternatives Analysis

A facility requirements analysis was accomplished to identify the shortfalls of the existing airport and to identify development items that would enable Lambert to effectively solve the shortfalls and meet projected demand levels. The analysis examined major components of the airport, including runways, airspace, terminals and ground transportation. This evaluation confirmed that Lambert needed an east-west parallel runway system capable of accommodating simultaneous independent Instrument Flight Rules (IFR) approaches.

The MPS included a comprehensive re-evaluation of possible development options, including an analysis of the alternatives studied as part of the previous LAMP. It was determined that the use of a Precision Runway Monitor (PRM) would enable consideration of runway development alternatives, which were rejected in previous studies. PRM is a system comprised of a rapid update radar, an enhanced color graphic monitor, and software package which aids the air traffic controller in more accurately monitoring the position of aircraft on final approach to a runway. PRM is the primary tool that has allowed the FAA to approve simultaneous independent instrument approaches to parallel runways spaced as little as 3,000 feet apart (3,400 feet for straight-in approaches). The PRM allows sufficient runway separation to allow simultaneous independent IFR approaches during marginal visual and instrument meteorological conditions. The alternatives analysis process considered operational, financial and environmental factors. From an initial list of more than 40 development concepts, the STLAA selected the airport development alternative, designated Alternative W-1W, as its preferred alternative.

THE PROPOSED IMPROVEMENTS TO LAMBERT

The STLAA has proposed airside and landside improvements to Lambert to enable the airport to meet projected levels of activity. The City's preferred development alternative, known as W-1W, includes a new parallel runway (12W/30W), 9,000 feet long by 150 feet wide, located at the southwestern side of Lambert in the City of Bridgeton. This runway will be located parallel to and 4,100 feet from existing runway 12L/30R with a staggered threshold of approximately 12,100 feet. This runway has been proposed to improve airfield capacity during both visual meteorological conditions (VMC) and instrument meteorological conditions (IMC).

The two parallel runways at Lambert, which are 1,300 feet apart, are too close together to allow simultaneous independent approaches. With the proposed improvements, the weighted hourly capacity at Lambert will be increased. With the use of a PRM, the separation of the new runway from the existing runways will be of sufficient distance to allow the airport to accommodate simultaneous independent approaches during IMC. Lambert does not currently have this capability. This feature will allow Lambert to reduce delay times, improve adverse weather capabilities, enhance capacity, and continue to accommodate hubbing operations such as the system TWA is now using at Lambert.

Other associated actions include property acquisition, terminal expansion, roadway improvements, and relocation of several airport tenant operations. A summary of the major components of the development plan and the proposed phasing is provided in Section 5, Alternatives Analysis, of this ROD.

EIS PROCESS

On August 17, 1995**,** the FAA began the public phase of the environmental process involving STLAA site-specific development proposals, which included a new runway for Lambert, by announcing in the Federal Register (60 Fed. Reg. 42938) its intent to prepare an Environmental Impact Statement (EIS), and by requesting scoping comments. Scoping meetings were held with the general public and with Federal, state and local agencies on September 6 and 7, 1995. See FEIS Section 7.0, regarding public involvement, and FEIS Appendix J, for a summary of scoping comments.

On October 4, 1996**,** a Notice of Availability of the Draft Environmental Impact Statement (DEIS) was published in the Federal Register (61 Fed. Reg. 51939). Public comments were taken on the DEIS from the date of its release until January 17, 1997. A public hearing was held on October 28, 1996. Appendix V of the FEIS contains a summary of comments and responses on the DEIS, which were received from the public and government agencies during the hearing as well as through the mail.

The FEIS was approved by the FAA on December 19, 1997, and released to the public on December 22, 1997. The FEIS addressed areas of public concern by way of modifications to the DEIS text and specific responses to public comments.

Pursuant to 40 CFR 1506.10, the U.S. Environmental Protection Agency (EPA) published a notice of the availability of the approved FEIS in the Federal Register on January 2, 1998 (63 Fed. Reg. 75). According to CEQ regulations, the FAA was required to wait a minimum of 30 days after the notice of availability of the approved FEIS before issuing its ROD. That 30-day waiting period has passed.

Although the FAA did not solicit public comment on the FEIS, several public agencies, community groups, and citizens submitted written comments for agency consideration. The FAA has to the extent practicable considered all comments received on the FEIS. Appendices A, B, C, D, E and G of the ROD respond to substantive agency and public comments on the FEIS and any new significant issues that have arisen.